



# UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE  
United States Patent and Trademark Office  
Address: COMMISSIONER FOR PATENTS  
P.O. Box 1450  
Alexandria, Virginia 22313-1450  
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/519,292	12/23/2004	Guido Knobel	04-605	9139
34704 7590 02/17/2009 BACHMAN & LAPOINTE, P.C. 900 CHAPEL STREET SUITE 1201 NEW HAVEN, CT 06510				
EXAMINER				
BODAWALA, DIMPLE N				
ART UNIT		PAPER NUMBER		
1791				
MAIL DATE		DELIVERY MODE		
02/17/2009		PAPER		

**Please find below and/or attached an Office communication concerning this application or proceeding.**

The time period for reply, if any, is set in the attached communication.

### Office Action Summary

**Application No.**

10/519,292

**Applicant(s)**

KNOBEL, GUIDO

**Examiner**

DIMPLE N. BODAWALA

**Art Unit**

1791

**Period for Reply** -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 24 November 2008.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 25-28 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 25-28 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☒ The drawing(s) filed on 24 November 2004 is/are: a) ☐ accepted or b) ☒ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
  2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
  3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SF-08)  
Paper No(s)/Mail Date \_\_\_\_\_
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date \_\_\_\_\_
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: \_\_\_\_\_

## **DETAILED ACTION**

### ***Specification***

1. The specification is objected to as failing to provide proper antecedent basis for the claimed subject matter. See 37 CFR 1.75(d) (1) and MPEP § 608.01(o). Correction of the following is required: Claims of the instant application cites structural limitation such as “temperature-controlled ram”, which is not supported by the disclosure of the instant application. Instant disclosure cites rams (3.1-3.4), but fails to describe that such rams are temperature-controlled rams.

### ***Drawings***

2. The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the claimed limitations such as “source of cooling water” as cited in claims 27-28 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as “amended.” If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency.

Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

***Claim Rejections - 35 USC § 112***

3. The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

4. Claims 25-28 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the written description requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to reasonably convey to one skilled in the relevant art that the inventor(s), at the time the application was filed, had possession of the claimed invention.
5. Claims 25-28 are rejected because claims cite means-plus-function such as "...means for selectively moving the temperature-controlled ram into and out of the mold...", and disclosure of the instant application suggests the movement of ram, but fails to provide or describe or suggest an adequate structure for performing the recited function.

6. Claim 25 is rejected because claim 25 cites means-plus-function such as "...means for selectively moving the displacement ram within the axial bore of the temperature-controlled ram and into and out of the mold", and disclosure of the instant application suggests the movement of displacement ram, but fails to provide or describe or suggest an adequate structure for performing the recited function.

7. Claim 25 is rejected because claim 25 cites limitation such as "displacement arm" lacks sufficient antecedent basis within the disclosure of the instant application. Disclosure of the instant application describes or discloses displacement ram, not a displacement arm.

8. Claim 25 is rejected because claim 25 cites limitation such as "a displacement arm movably mounted within the axial bore of the temperature-controlled ram" lacks sufficient antecedent basis within the disclosure of the instant application. Disclosure of the instant application describes or discloses displacement ram, not a displacement arm; and furthermore the disclosure describes the displacement ram is guided passes through the ram, does not describe that the displacement arm movably mounted within the axial bore of ram.

9. Claims 27-28 are rejected because claims cite means-plus-function such as "...means for feeding cooling water under pressure to the porous internal space of the temperature-controlled ram for expanding the diaphragm into the mold", and disclosure of the instant application suggests the cooling water (20) is applied to the interior space

(18), but fails to provide or describe or suggest an adequate structure for performing the recited function.

10. Claims 27-28 are rejected because claims cite limitation such as “porous internal space” lacks sufficient antecedent basis within the disclosure of the instant application. Disclosure of the instant application describes or discloses an internal space (18), but fails to suggest or describe that the internal space is a porous internal space.

11. Claims 27-28 are rejected because claims cite limitation such as “source of cooling water” ” lacks sufficient antecedent basis within the disclosure of the instant application. Disclosure of the instant application describes or discloses cooling water within an internal space (18), but fails to suggest or describe that the source of cooling water and recited function such as feeding water.

12. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

13. Claims 25-28 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

14. Claims 25-28 are vague and indefinite because they are unclear how or which adequate structure element is involved for performing recited function such as moving the temperature-controlled ram to selective positions.

15. Claim 25 is vague and indefinite because it is unclear how or which adequate structure element is involved for performing recited function such as moving the displacement arm to selective positions.

16. Claim 25 is vague and indefinite because it is unclear how the displacement arm is movably mounted within the axial bore of temperature controlled arm.

17. Claims 27-28 are vague and indefinite because they are unclear how or which adequate structure element is involved for performing recited function such as supplying or feeding cooling water to the internal space of the temperature-controlled ram.

***35 USC § 112, Sixth paragraph***

18. Where claim limitations (means plus function) of claims 25-28 meet the 3-prong analysis and is being treated under 35 U S C 112, sixth paragraph, the examiner will include a statement in the Office action that the claim limitations being treated under 35 U S C 112, sixth paragraph.

19. Instant application cites means plus functions such as means for selectively moving the temperature-controlled ram into and out of the mold; means for selectively moving the displacement arm within the axial bore of the temperature-controlled ram and into and out of the mold; means for feeding the cooling water under pressure to the internal space of the temperature controlled ram for expanding the diaphragm. However, instant application fails to disclose structural elements for performing cited functions.

20. Haas (US 5,753,292) discloses plunger assembly comprises ram (2,4,6) having axial bore, wherein axial bore comprises shaft (8) as a displacement arm (See col.5 lines

18-20). It further discloses spring (11) as means for moving the ram and displacement arm (See figures 1-2).

21. Aasted (EP 0945069) discloses displacement arm comprises piston at one end which allows the arm to move within the axial bore of the ram (See figure 3). It further discloses hydraulic or pneumatic pressure effects which help the core member to move in a selected position (See para. # 43, 48).

22. Knobel (WO 98/52425) discloses ram and lifting device (7) as a means for selectively moving the ram into and out of the mold (See figures 1-2; translation).

23. Barger et al. (US 3,171,731) discloses an invention which comprises plunger (14) having internal space, wherein internal space comprises tube or channels (48,50) for supplying coolant, could be water or air, from the source (81) under the pressure.

24. Young (US 2,363,107) discloses molding apparatus which comprises male mold member (14) as temperature-controlled ram and hydraulic cylinder (9) associated with the die (14) via rod (10), wherein cylinder (9) as means for selectively moving the displacement arm within the axial bore of the temperature-controlled ram and into and out of the mold. It further discloses tank (61) as a supply source of pressurized fluid and conduit (24) as means for supplying pressurized fluid within the internal space of the male mold member (14) (See figures 1-2).

***Claim Rejections - 35 USC § 102***

25. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.



26. **Claim 25 is rejected under 35 U.S.C. 102(b) as being anticipated by Aasted (EP 0 945 069).**

27. Aasted discloses an apparatus for producing confectionary product having an outer shell, wherein apparatus comprising a mold having molding cavity (3); and core member (6), wherein core member comprises means for arranging temperature of the core (See para. # 41), thus core member is capable to use as a temperature controlled ram, wherein temperature controlled ram (6) having an axial bore (See figure 13). Figure 13 further shows that displacement arm (not labeled) movably mounted within the axial bore of ram. Figure 13 shows that the displacement arm comprises piston at one end which allows the arm to move within the axial bore of the ram. It further discloses hydraulic or pneumatic pressure effects which help the core member to move in a selected position (See para. # 43, 48).

28. **Claim 26 is rejected under 35 U.S.C. 102(b) as being anticipated by Knobel (WO 98/52425).**

29. Knobel discloses an invention which comprises mold (9) having mold cavity (12), stamp (5) having plates (13,14) and projection (18) wherein projection (18) is involved to guide cooling medium by having tube within the axial bore (not labeled), wherein tube for supplying gas from the source of gas (16) (See figure 3), thus projection is capable to use as temperature controlled ram. It further discloses lifting device (7) as a means for selectively moving the ram into and out of the mold (See figures 1-2; translation).

30. **Claim 26 is rejected under 35 U.S.C. 102(b) as being anticipated by Barger et al. (US 3,171,731).**

31. Barger et al. discloses an invention which comprises mold (10); plunger (24,40) with coolant channels and thermocouple to sense the temperature of the plunger, thus, plunger is capable to use as a temperature controlled ram, wherein ram comprises an axial bore for receiving tube (48) (See figure 2); a source of coolant (82) for supplying coolant from the source through the tube (48) (See figures 2-3), Wherein coolant is water or gas or air (See col.1 lines 31-33). It further teaches that the plunger (14) is capable to entry within the cavity (12) or able to raise its shaping position (See col.3 lines 25-45), thus, inherently suggests that the invention comprises means for moving the plunger into and out of mold.

***Claim Rejections - 35 USC § 103***

32. The text of those sections of Title 35, U.S. Code not included in this action can be found in a prior Office action.

33. **Claim 27 is rejected under 35 U.S.C. 103(a) as being unpatentable over Barger et al. (US 3,171,731) in view of Richie et al. (US 3,013,306) and either Austin (US 4,076,207) or Young (US 2,363,107).**

34. Barger et al. discloses molding tool which comprises mold (10) having molding cavity (12) adapted to receive molding material; a plunger as a ram (24,40) cooperates with the mold (10) (See col.4 lines 10-14), wherein ram comprising hollow chamber (44)

as an internal space; and exterior wall (22, 42), wherein internal space (44) comprising porous screen (68) and discrete particles (66), but fails to teach porous internal space. It further teaches that the internal space (44) comprises plurality of tubes (48,50) for feeding the interior space with coolant (See col.4 lines 21-25), such as cooling water (See col.1 lines 31-45), thus, the plunger is capable to use as temperature controlled ram. It further teaches that the wall of the plunger is formed of metallic material (See col. 4 lines 64-69). It further discloses coolant supplying chamber (82) as a supply source of cooling water (See figure 3). It further teaches that the plunger (14) is capable to entry within the cavity (12) or able to raise its shaping position (See col.3 lines 25-45), thus, inherently suggests that the invention comprises means for moving the plunger into and out of mold.

35. Barger et al. discloses all claimed structural limitations as discussed above. It further discloses plunger having internal space (44) comprising porous screen (68) and discrete particles (66), but fails to teach porous internal space.

36. Richie et al. discloses an invention which comprises plunger (2), wherein plunger could be drilled force or porous metal (See col.3 lines 18-25).

37. Thus, it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the invention of Barger et al. by providing porous plunger of Richie et al. because porous plunger is capable to have porous internal space, which is involved to circulate the pressurized fluid within the contour of plunger, and controlled the temperature of plunger in order to conform to the desired shape of mold during the mold closing position.

38. Barger et al. and/or Richie et al. disclose plunger having exterior metallic wall, but fails to provide a flexible sheath surrounding the internal space.

39. Austin comprises mold as a plunger having liner (11) as an external surface is made of flexible, resilient elastomer (See col.2 lines 28-32), and, thus, the mold being invertible for release of molded food product by deformation of the liner from the weight of food product within the liner (See col.1 lines 38-45).

40. Young discloses an invention which comprises male die (14) is surrounded by expandable material (20,20',20") which is preferably rubber or other suitable resilient material, wherein such material is capable to expand by reason of the pressure of fluid flows within the internal space of the plunger (14) (See col.5 lines 9-45).

41. Thus, it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the invention of Barger et al. and/or Richie et al. by providing flexible, resilient liner as an external surface of the plunger as taught by either Austin or Young in order to allow plunger to release easily from the molded product without damaging the shape of the molded product, and, also such configuration of plunger allowed the plunger to be used as a ram for molding confectionary product.

**42. Claim 28 is rejected under 35 U.S.C. 103(a) as being unpatentable over Barger et al. (US 3,171,731) in view of Richie et al. (US 3,013,306) and Walker (US 4,057,874).**

43. Barger et al. discloses molding tool which comprises mold (10) having molding cavity (12) adapted to receive molding material; a plunger as a ram (24,40) cooperates

with the mold (10) (See col.4 lines 10-14), wherein ram comprising hollow chamber (44) as an internal space; and exterior wall (22, 42), wherein internal space (44) comprising porous screen (68) and discrete particles (66), but fails to teach porous internal space. It further teaches that the internal space (44) comprises plurality of tubes (48,50) for feeding the interior space with coolant (See col.4 lines 21-25), such as cooling water (See col.1 lines 31-45) thus, the plunger is capable to use as temperature controlled ram. It further teaches that the wall of the plunger is formed of metallic material (See col. 4 lines 64-69). It further discloses coolant supplying chamber (82) as a supply source of cooling water (See figure 3). It further teaches that the plunger (14) is capable to entry within the cavity (12) or able to raise its shaping position (See col.3 lines 25-45), thus, inherently suggests that the invention comprises means for moving the plunger into and out of mold.

44. Barger et al. discloses all claimed structural limitations as discussed above. It further discloses plunger having internal space (44) comprising porous screen (68) and discrete particles (66), but fails to teach porous internal space.

45. Richie et al. discloses an invention which comprises plunger (2), wherein plunger could be drilled force or porous metal (See col.3 lines 18-25).

46. Thus, it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the invention of Barger et al. by providing porous plunger of Richie et al. because porous plunger is capable to have porous internal space, which is involved to circulate the pressurized fluid within the contour of plunger, and

controlled the temperature of plunger in order to conform to the desired shape of mold during the mold closing position.

47. Barger et al. discloses all claimed structural limitations as discussed above. It further discloses plunger having exterior metallic wall as a shell of rigid material, but fails to provide a passage having diaphragm.

48. Walker discloses molding tool having male pressing member, wherein male press comprises cylindrical wall (12) having passage in the bottom of the press, wherein passage is accommodated by flexible diaphragm (30) (See figure 1), wherein diaphragm is capable to stretch and distort within the cylinder based on the pressure application.

49. Thus, it would have been obvious to one of ordinary skill in the art at the time of Applicant's invention to modify the invention of Barger et al. by providing configuration of external surface of the plunger as taught by Walker because configuration of the external wall comprises passage accommodated by the diaphragm, which is capable to stretch and distort within the body of plunger based on the pressure application, and, thus, able to release the molded product from the external surface of the plunger without damaging the shape of the molded product.

#### ***Response to Arguments***

50. Applicant argues that the none of cited references (EP 0 945 069; EP 0 920 810; WO 98/52425; and US 5,635,230) from the previous office action teach or suggest a temperature controlled ram having axial bore in a displacement arm movably mounted within the axial bore wherein the displacement arm is selectively displace within the axial

bore of the temperature controlled ram for movement into and out of the mold as cited in claim 25; the temperature controlled ram having an axial bore with a tube located within the axial bore which tube communicated with the molds, pressure source of gas connected to the tube and means for supplying gas from the source through the tube and into the mold as cited in claim 26; temperature controlled ram having porous internal space and flexible sheath surrounding the internal space, wherein internal space feeds by cooling water as cited in claims 27-28; and also a diaphragm is involved to cover the passage as cited in claim 28.

51. In response to Applicant's arguments with respect to claim 25, is unclear how the temperature controlled ram having axial bore in a displacement arm movably mounted within the axial bore... (See page 4 of remark). However, the prior art, Aasted (EP 0 945 069) discloses a temperature controlled ram having axial bore and a displacement arm movably mounted within the axial bore wherein the displacement arm is selectively displace within the axial bore of the temperature controlled ram for movement into and out of the mold (See figure 13). Therefore, rejection of claim 25 is maintained over Aasted (EP 0 945 069).

52. In response to Applicant's arguments with respect to claim 26, the prior art, Knobel (WO 98/52425) discloses the temperature controlled ram having an axial bore with a tube located within the axial bore which tube communicated with the molds, pressure source of gas connected to the tube and means for supplying gas from the source through the tube and into the mold (See figure 3).

53. Applicant's arguments with respect to claims 27-28 have been considered but are moot in view of the new ground(s) of rejections as discussed above.

***Conclusion***

54. Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE MONTHS from the mailing date of this action. In the event a first reply is filed within TWO MONTHS of the mailing date of this final action and the advisory action is not mailed until after the end of the THREE-MONTH shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than SIX MONTHS from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to DIMPLE N. BODAWALA whose telephone number is (571)272-6455. The examiner can normally be reached on Monday - Friday at 8:30 am - 5:00 pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, PHILLIP C. TUCKER can be reached on (571) 272-1095. The fax phone



number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

Dimple N Bodawala  
Examiner  
Art Unit 1791

/D. N. B./  
Examiner, Art Unit 1791

/Philip C Tucker/  
Supervisory Patent Examiner, Art Unit 1791